

ABSTRACT

The invention relates to a magnetic sensor to determine the position of a cellular phone (2) in linear movement along an axis of translation, the sensor comprising a measuring cell fitted to a magnetic circuit and capable of measuring the variations in the value of the magnetic induction flux consecutive with the reluctance variations of the magnetic circuit.

According to the invention, the sensor comprises a single delimiting fixed magnetic circuit between two fixed pole parts:

- a variable air gap (4) within which at least a magnetic induction is created that extends along a length parallel to the axis of translation and at least equal to the travel to be measured of the cellular phone, the variable air gap (4) being capable of allowing the linear movement of the cellular phone (2) which is equipped with means for modifying the reluctance of said variable air gap, mechanically independent of said sensor;

- and a measurable air gap (7) to which the measuring cell is fitted.

(Figure to be published: figure 1)